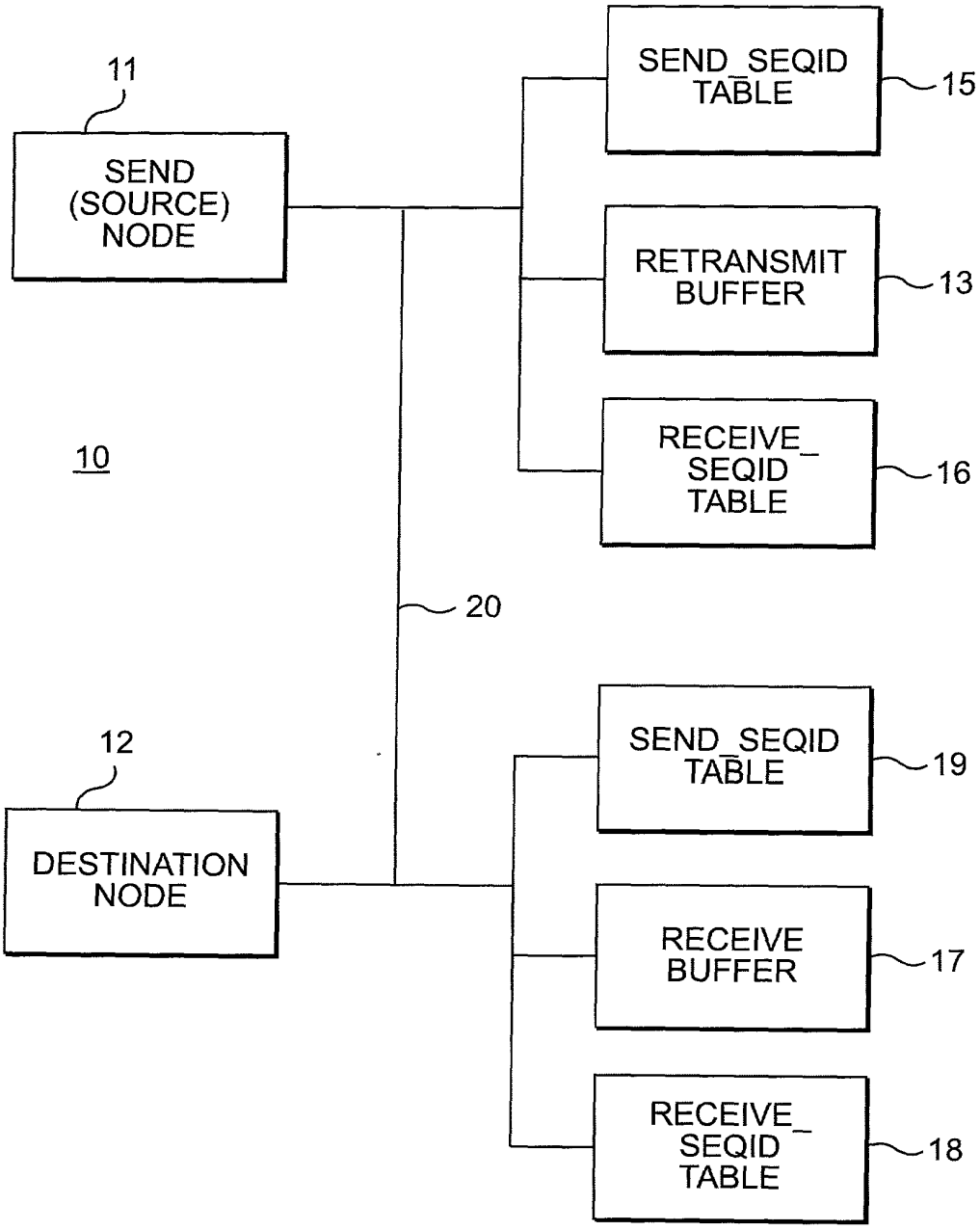
11
SEND (SOURCE) NODE
SEND_SEQID TABLE
15
RETRANSMIT BUFFER
13
RECEIVE_ SEQID TABLE
16
10
20
12
DESTINATION NODE
SEND_SEQID TABLE
19
RECEIVE BUFFER
17
RECEIVE_ SEQID TABLE
18

FIG. 1

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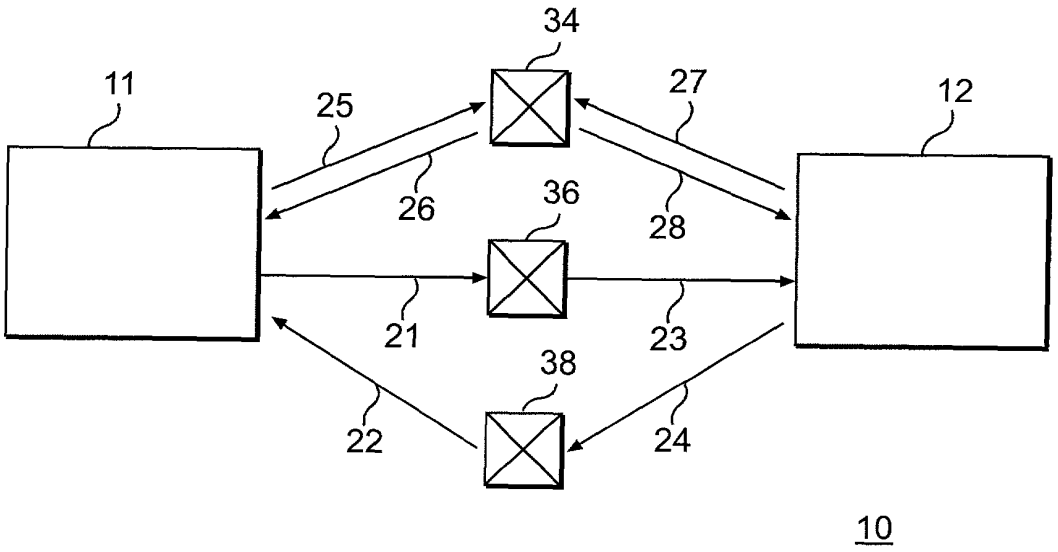


FIG. 2

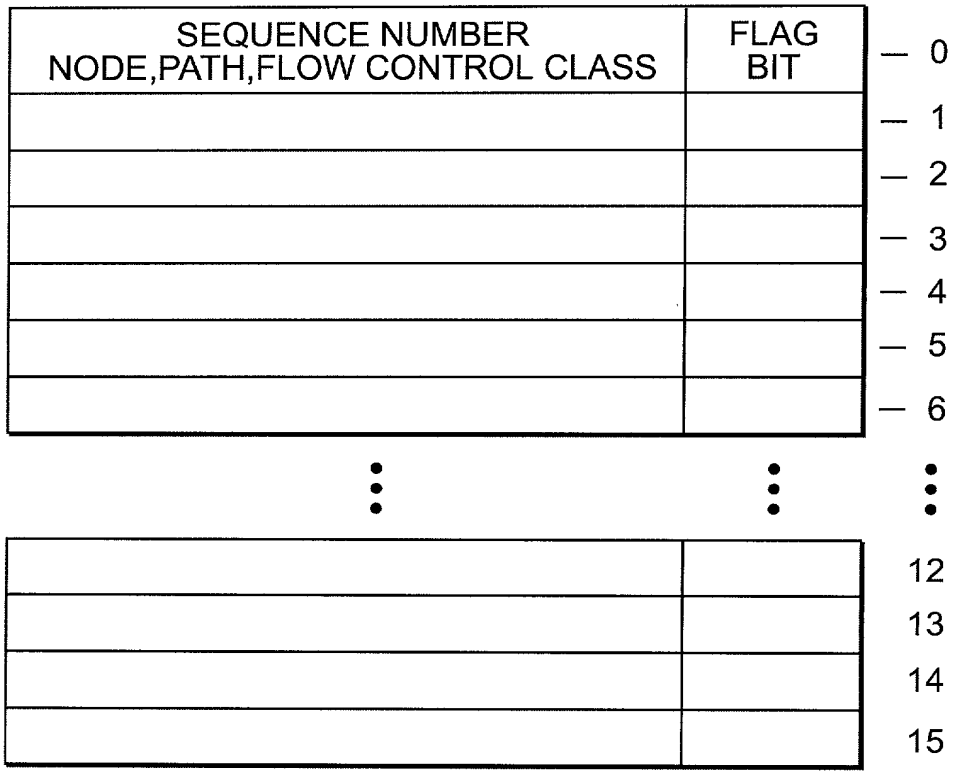

SEQUENCE NUMBER
NODE,PATH,FLOW CONTROL CLASS
FLAG
BIT
0
1
2
3
4
5
6
12
13
14
15

FIG. 3

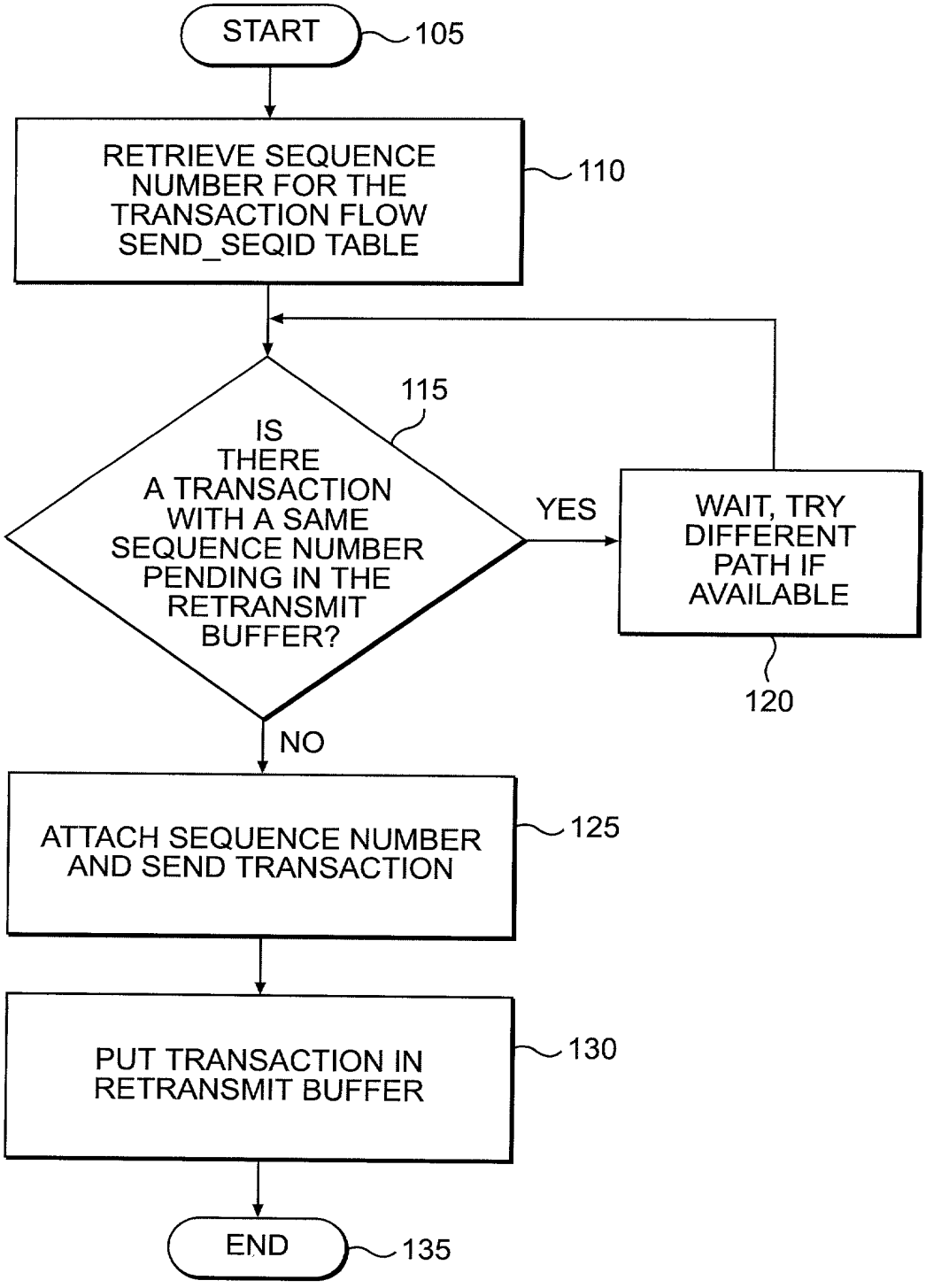

START
105
RETRIEVE SEQUENCE NUMBER FOR THE TRANSACTION FLOW SEND_SEQID TABLE
110
115
IS THERE A TRANSACTION WITH A SAME SEQUENCE NUMBER PENDING IN THE RETRANSMIT BUFFER?
YES
WAIT, TRY DIFFERENT PATH IF AVAILABLE
120
NO
ATTACH SEQUENCE NUMBER AND SEND TRANSACTION
125
PUT TRANSACTION IN RETRANSMIT BUFFER
130
END
135

FIG. 4

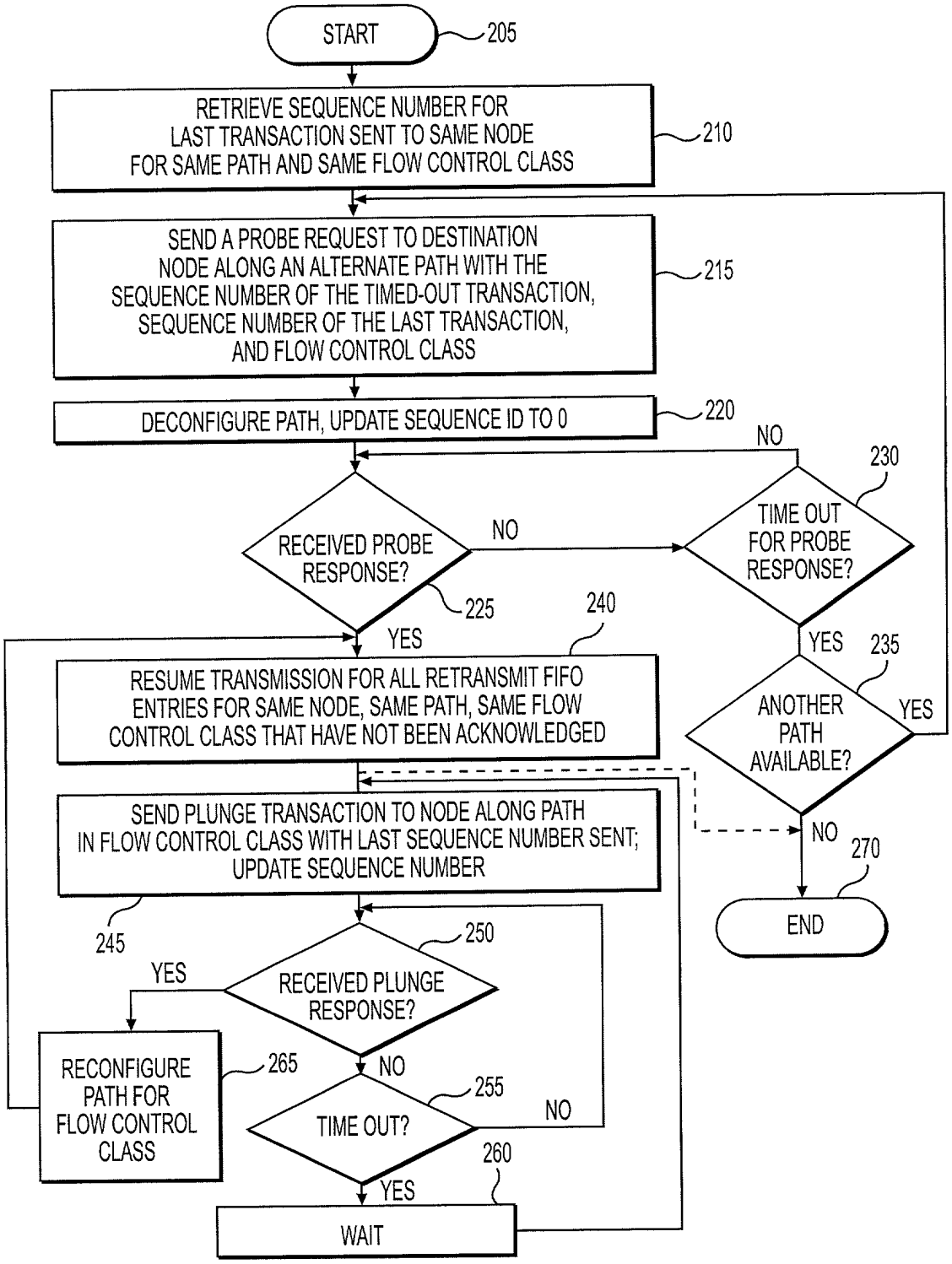

START
205
RETRIEVE SEQUENCE NUMBER FOR LAST TRANSACTION SENT TO SAME NODE FOR SAME PATH AND SAME FLOW CONTROL CLASS
210
SEND A PROBE REQUEST TO DESTINATION NODE ALONG AN ALTERNATE PATH WITH THE SEQUENCE NUMBER OF THE TIMED-OUT TRANSACTION, SEQUENCE NUMBER OF THE LAST TRANSACTION, AND FLOW CONTROL CLASS
215
DECONFIGURE PATH, UPDATE SEQUENCE ID TO 0
220
RECEIVED PROBE RESPONSE?
225
NO
TIME OUT FOR PROBE RESPONSE?
230
NO
YES
YES
ANOTHER PATH AVAILABLE?
235
YES
NO
RESUME TRANSMISSION FOR ALL RETRANSMIT FIFO ENTRIES FOR SAME NODE, SAME PATH, SAME FLOW CONTROL CLASS THAT HAVE NOT BEEN ACKNOWLEDGED
240
SEND PLUNGE TRANSACTION TO NODE ALONG PATH IN FLOW CONTROL CLASS WITH LAST SEQUENCE NUMBER SENT; UPDATE SEQUENCE NUMBER
245
RECEIVED PLUNGE RESPONSE?
250
YES
NO
TIME OUT?
255
NO
YES
RECONFIGURE PATH FOR FLOW CONTROL CLASS
265
WAIT
260
END
270

FIG. 5

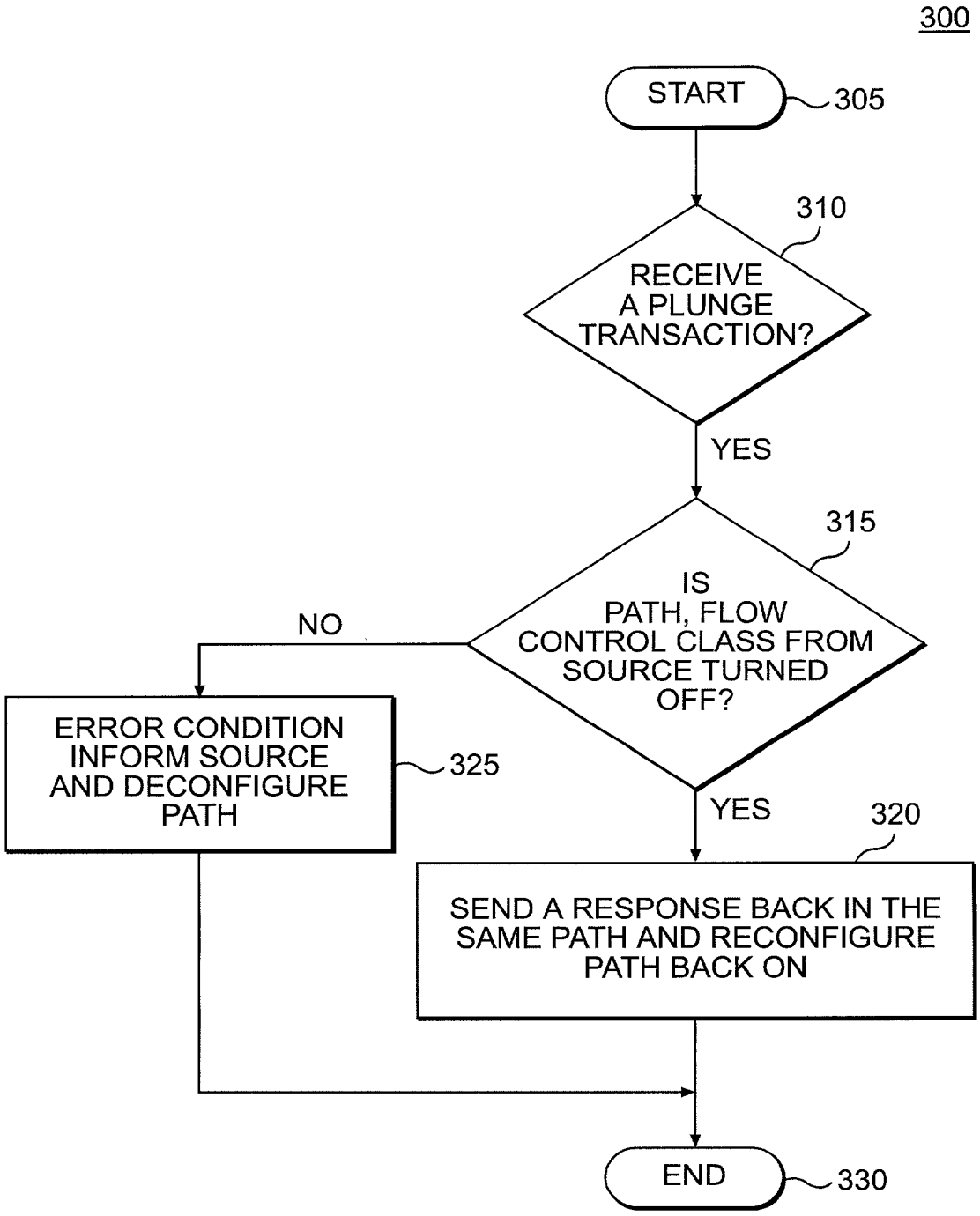
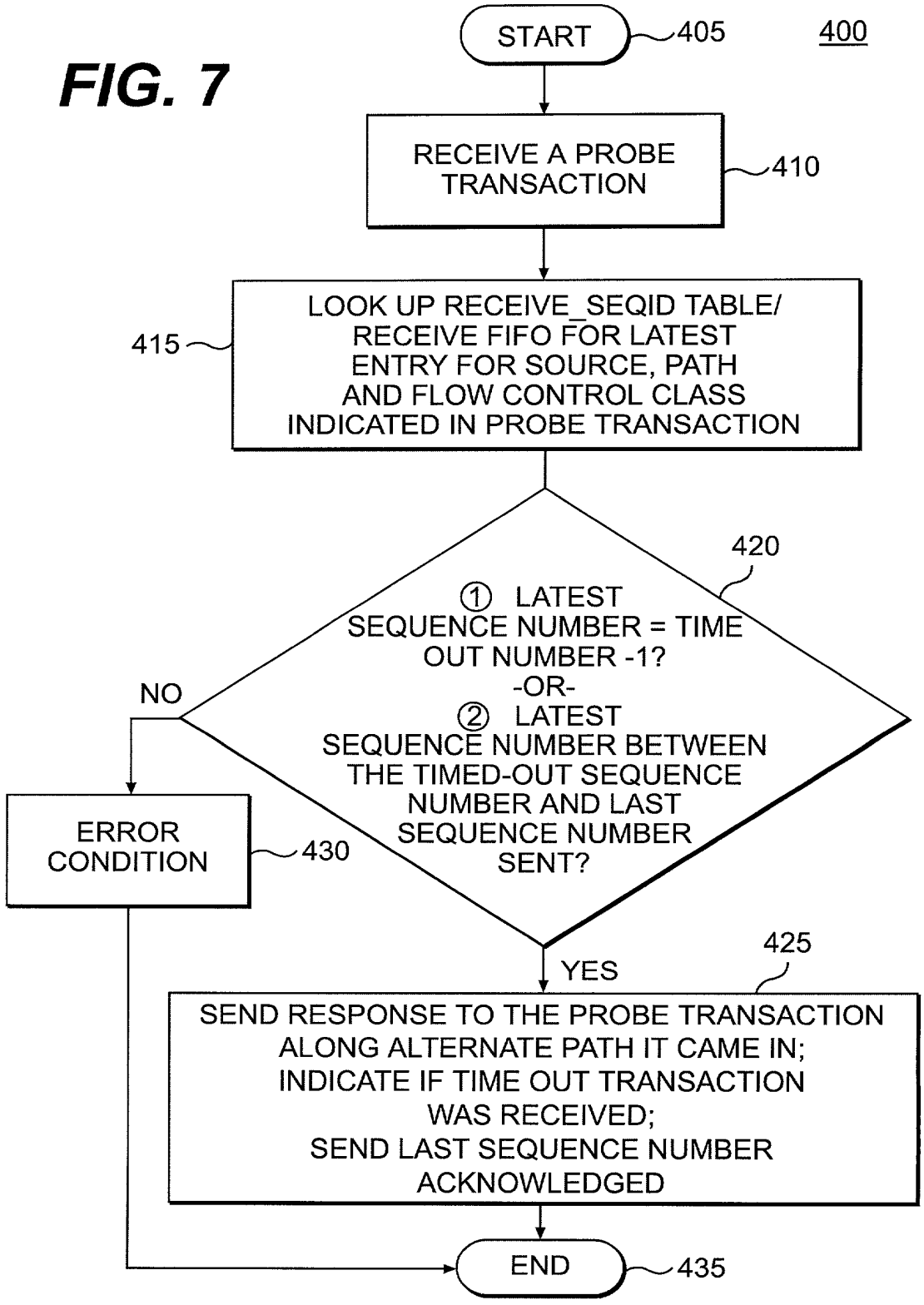

300
START
305
310
RECEIVE A PLUNGE TRANSACTION?
YES
315
IS PATH, FLOW CONTROL CLASS FROM SOURCE TURNED OFF?
NO
ERROR CONDITION INFORM SOURCE AND DECONFIGURE PATH
325
YES
320
SEND A RESPONSE BACK IN THE SAME PATH AND RECONFIGURE PATH BACK ON
END
330

FIG. 6

FIG. 7



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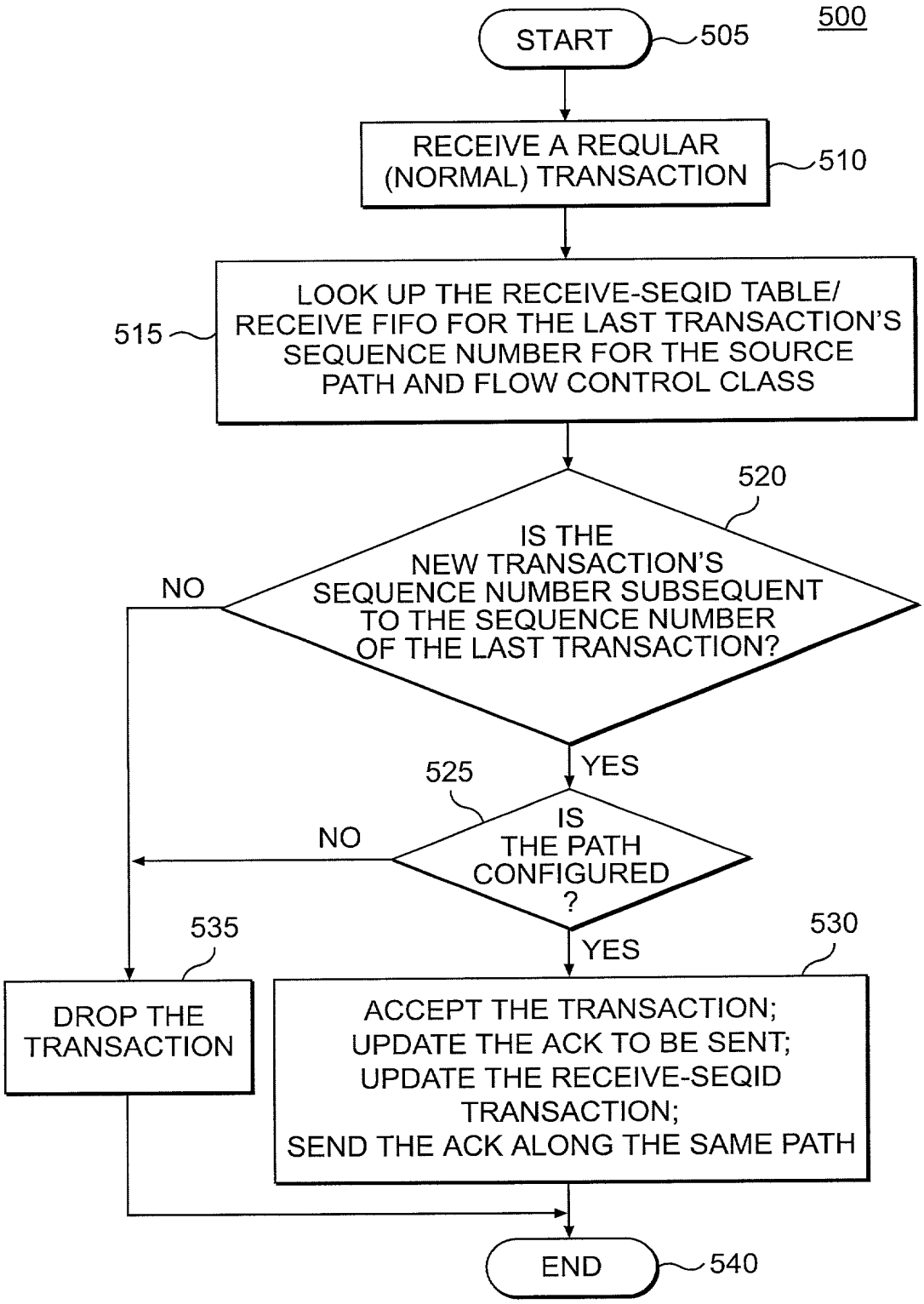
500
START
505
RECEIVE A REQULAR (NORMAL) TRANSACTION
510
LOOK UP THE RECEIVE-SEQID TABLE/ RECEIVE FIFO FOR THE LAST TRANSACTION'S SEQUENCE NUMBER FOR THE SOURCE PATH AND FLOW CONTROL CLASS
515
520
IS THE NEW TRANSACTION'S SEQUENCE NUMBER SUBSEQUENT TO THE SEQUENCE NUMBER OF THE LAST TRANSACTION?
NO
YES
525
IS THE PATH CONFIGURED ?
NO
YES
535
DROP THE TRANSACTION
530
ACCEPT THE TRANSACTION; UPDATE THE ACK TO BE SENT; UPDATE THE RECEIVE-SEQID TRANSACTION; SEND THE ACK ALONG THE SAME PATH
END
540

FIG. 8